



## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS-R8-ES-2019-0113; FF09E22000 FXES11130900000 212]

RIN 1018-BE64

### Endangered and Threatened Wildlife and Plants; Reclassification of Stephens'

### Kangaroo Rat From Endangered to Threatened With a Section 4(d) Rule

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), are reclassifying the Stephens' kangaroo rat (*Dipodomys stephensi*) from endangered to threatened under the Endangered Species Act of 1973, as amended (Act). This action is based on our evaluation of the best available scientific and commercial information, which indicates that the species' status has improved such that it is not currently in danger of extinction throughout all or a significant portion of its range, but that it is still likely to become so throughout all of its range in the foreseeable future. We also finalize a rule under section 4(d) of the Act that provides for the conservation of the Stephens' kangaroo rat.

**DATES:** This rule is effective [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** This final rule is available on the internet at <https://www.regulations.gov>. Comments and materials we received, as well as supporting documentation we used in preparing this rule, are available for public inspection at <https://www.regulations.gov> at Docket No. FWS-R8-ES-2019-0113.

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## **SUPPLEMENTARY INFORMATION:**

### **Executive Summary**

*Why we need to publish a rule.* Under the Act, a species may warrant reclassification from endangered to threatened if it no longer meets the definition of endangered (in danger of extinction). The Stephens' kangaroo rat was listed as endangered in 1988 (53 FR 38465, September 30, 1988), and we are finalizing our proposed reclassification (downlisting) (85 FR 50991, August 19, 2020) of the Stephens' kangaroo rat as threatened because we have determined it is not currently in danger of extinction. Downlisting a species as a threatened species can be completed only by issuing a rule.

*What this document does.* This rule reclassifies the Stephens' kangaroo rat from endangered to threatened, with a rule issued under section 4(d) of the Act (hereafter referred to as a "4(d) rule").

*The basis for our action.* Under the Act, we may determine that a species is an endangered species or a threatened species because of any of five factors: (A) The present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. We may reclassify a listed species if the best commercial and scientific data available indicate a change in status is appropriate. We have determined that the Stephens' kangaroo rat is no longer in danger of extinction, and therefore does not meet the definition of an endangered species, due to a reduction of threats since listing and the implementation of conservation actions.

However, the species is still affected by the following threats to the extent that the species meets the definition of a threatened species under the Act:

- Habitat loss and degradation due to urbanization, agricultural activities, and nonnative vegetation; and
- Isolation of existing populations due to habitat fragmentation.

The cumulative effects of climate change and wildfire, which could result in an increase in the extent of nonnative grasslands, represents a low-level stressor to the Stephens' kangaroo rat and its habitat, and based on climate change projections, is likely to remain at this level to the 2060s. Existing regulatory mechanisms and conservation efforts do not effectively address existing habitat fragmentation or the introduction and spread of nonnative plants or improve population connectivity and dispersal.

*We are promulgating a section 4(d) rule.* This 4(d) rule prohibits all intentional take of the Stephens' kangaroo rat and specifically tailors the incidental take exceptions under section 9(a)(1) of the Act. This provides protective mechanisms to Federal, State, and Tribal partners and private landowners, so that they may continue with certain activities that benefit the species or its habitat or are not anticipated to cause direct injury or mortality to Stephens' kangaroo rat. We have determined that such measures will facilitate the conservation and recovery of the species.

### **Previous Federal Actions**

Please refer to the proposed rule to reclassify the Stephens' kangaroo rat published on August 19, 2020 (85 FR 50991), for a detailed description of previous Federal actions concerning this species.

### **Summary of Changes from the Proposed Rule**

Based upon our review of the Federal, State, peer review, and public comments and any new relevant information that became available, we reevaluated our proposed rule and made changes as appropriate in this final rule. Other than minor clarifications

and incorporation of additional information on the species' biology and populations, this determination differs from the proposal in the following ways:

(1) As discussed in the 2019 species report and 2020 proposed rule, we developed a habitat suitability model (HSM) based on available habitat mapping information, and the Conservation Biology Institute (CBI) was in the process of developing a more detailed range-wide HSM (Service 2019, pp. 14–15). Since that time, CBI completed that more comprehensive HSM for Stephens' kangaroo rat, which we are using to update the potential habitat projections for use as a proxy for the species' demographic information. This new model provides better resolution through use of spectral imagery and other environmental data layers. The new HSM uses a smaller patch size of 50 hectares (ha) (124 acres (ac)) and dispersal distance of 200 meters, compared to what we used in our original model (100 ha (247 ac)) and a dispersal distance of 61.5 meters (202 ft) as a cutoff for fragmented patches. Therefore, we removed the habitat fragmentation calculations in the updated species report (Service 2021, entire) that were based on the 100-ha (247-ac) size and shorter dispersal distance.

Incorporation of the more recent HSM also required us to revise the amount and ownership breakdown of modeled habitat for Stephens' kangaroo rat. The amount of modeled habitat in the original model, identified in the proposed rule, was 91,538 ac (37,044 ha), compared to the new model (184,367 ac (74,610 ha)). The amount of conserved lands also increased from 28,567 ac (11,561 ha) in the proposed rule, to 68,701 ac (27,802 ha) in this final rule. This includes approximately 1,287 ac (521 ha) of modeled habitat within the species' range in San Bernardino County, California.

(2) We updated this final rule and the species report with all the above changes and with other suggested edits received during the open comment period. The revised species report is version 1.2 (Service 2021, entire).

(3) We revised the section 4(d) rule based on public comments regarding fire safety measures and have made the defensible space requirements more stringent than the State of California fire code as requested.

### **Supporting Documents**

A team of Service biologists prepared a species report for the Stephens' kangaroo rat (Service 2021, entire). The team was composed of Service biologists, in consultation with other species experts. The species report represents a compilation of the best scientific and commercial data available concerning the status of the species, including the impacts of past, present, and future factors (both negative and beneficial) affecting the species.

In accordance with our joint policy on peer review published in the *Federal Register* on July 1, 1994 (59 FR 34270), and our August 22, 2016, memorandum updating and clarifying the role of peer review of listing actions under the Act, we sought peer review of the information contained in the Stephens' kangaroo rat species report. We sent the species report to four independent peer reviewers and received one response. Results of this structured peer review process can be found at <https://www.regulations.gov>. The status report was also submitted to our Federal and State partners for scientific review. We received review from two partners (Department of Defense (DoD) and California Department of Fish and Wildlife (CDFW)). We incorporated the results of these reviews, as appropriate, into the final status report, which is the foundation for this final rule.

### **Reclassification Determination**

The Stephens' kangaroo rat is a small, nocturnal mammal that has a dusky cinnamon buff overfur, pure white underfur, and a lateral white tail band. The tail is crested and bicolored (Service 1997, pp. 1, 2, 25; Service 2021, chapter 2). Kangaroo rats possess a number of behavioral, morphological, and physiological adaptations that allow

them to inhabit warm, arid environments (Service 2021, pp. 2, 24).

Stephens' kangaroo rat habitat generally consists of open grasslands and sparsely vegetated scrub (Moore-Craig 1984, p. 6; O'Farrell and Uptain 1987, p. 44). The Stephens' kangaroo rat constructs and lives in underground burrow systems that are used as shelter, protection from predators, food storage (caching), and nesting. Areas of occupied (patchy) habitat consist of burrow entrances connected by a network of well-defined surface runways.

Populations of the Stephens' kangaroo rat occur in three geographic regions of southern California: western Riverside County, western San Diego County, and central San Diego County. At the time of listing in 1988, the known geographic range of the species included 11 general areas in Riverside and San Diego Counties, California (Service 1988, entire; Service 2021, chapter 3). Currently the species is extant or presumed extant in 17 areas (11 areas in Riverside County and 6 areas in San Diego County) (Service 2021, table 1, p. 5). Based on our analysis of recent detections and observations, the Stephens' kangaroo rat continues to be found in a patchy distribution in suitable (e.g., grasslands, open areas with forbs) habitat in western-southwestern Riverside County and central-northwestern San Diego County. Exact population trends and density estimates for the Stephens' kangaroo rat are not determinable at this time, given incomplete survey information and difficulty in detecting the species during surveys (Brehme *et al.* 2017, p. 8).

Because population trends have not been determinable for Stephens' kangaroo rat, suitable habitat was modeled in conjunction with species occurrence information to provide an estimate of currently available habitat (Service 2021, table 4, p. 53). This potentially suitable modeled habitat is used in lieu of rangewide occupied habitat estimates or rangewide population estimates. This modeled habitat was used in conjunction with current and historical survey reports to provide estimates of population-

level occupancy throughout the range (Service 2021, table 1, pp. 5–6). Additional background information on the Stephens' kangaroo rat can be found in the draft recovery plan and species report (Service 1997, entire; Service 2021, entire).

### *Current Conservation Efforts*

Two large-scale habitat conservation planning efforts have been implemented in Riverside County. Since listing, the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) has been implemented by the Riverside County Habitat Conservation Agency (RCHCA) (RCHCA 1996, entire), and the Western Riverside County Multi-Species Habitat Conservation Plan (Western Riverside MSHCP) has been implemented by the Regional Conservation Authority (Dudek and Associates 2003, entire)). The implementation of these conservation plans has helped to offset potential losses of habitat from urban and agricultural development. Ongoing management for Stephens' kangaroo rat and implementation of recovery actions by these agencies has helped reduce impacts throughout much of the species' range in Riverside County.

Three military installations also occur within the range of the species in western San Diego County. These DoD facilities (Marine Corps Base Camp Pendleton (Camp Pendleton); Naval Base Coronado Remote Training Site Warner Springs (Warner Springs); and Naval Weapons Station Seal Beach Detachment Fallbrook (Detachment Fallbrook) have developed, in coordination with the Service, integrated natural resources management plans (INRMPs) and are committed to actively managing their activities and habitat for the conservation of the Stephens' kangaroo rat. The INRMPs are based, to the maximum extent practicable, on ecosystem management principles and provide for the management of Stephens' kangaroo rat and its habitat while sustaining necessary military land uses. These three DoD facilities have implemented numerous actions to manage and conserve areas occupied by Stephens' kangaroo rat that aid in species recovery.

Implementation of these conservation efforts has greatly reduced the impact of

loss and degradation of habitat for the species on the lands conserved under the two HCPs and managed at the three military installations. See *Draft Recovery Plan Implementation and Status Criteria* below, for how these efforts are assisting conservation and reducing threats for the species.

#### *Draft Recovery Plan Implementation and Status Criteria*

Section 4(f) of the Act directs us to develop and implement recovery plans for the conservation and survival of endangered and threatened species unless we determine that such a plan will not promote the conservation of the species. Under section 4(f)(1)(B)(ii), recovery plans must, to the maximum extent practicable, include objective, measurable criteria which, when met, would result in a determination, in accordance with the provisions of section 4 of the Act, that the species be removed from the List.

Recovery plans provide a roadmap for us and our partners on methods of enhancing conservation and minimizing threats to listed species, as well as measurable criteria against which to evaluate progress towards recovery and assess the species' likely future condition. However, they are not regulatory documents and do not substitute for the determinations and promulgation of regulations required under section 4(a)(1) of the Act. A decision to revise the status of a species, or to delist a species, is ultimately based on an analysis of the best scientific and commercial data available to determine whether a species is no longer an endangered species or a threatened species, regardless of whether that information differs from the recovery plan.

There are many paths to accomplishing recovery of a species, and recovery may be achieved without all of the criteria in a recovery plan being fully met. For example, one or more criteria may be exceeded while other criteria may not yet be accomplished. In that instance, we may determine that the threats are minimized sufficiently and that the species is robust enough that it no longer meets the definition of an endangered species or a threatened species. In other cases, we may discover new recovery opportunities after



having finalized the recovery plan. Parties seeking to conserve the species may use these opportunities instead of methods identified in the recovery plan. Likewise, we may learn new information about the species after we finalize the recovery plan. The new information may change the extent to which existing criteria are appropriate for identifying recovery of the species. The recovery of a species is a dynamic process requiring adaptive management that may, or may not, follow all of the guidance provided in a recovery plan.

#### *Draft Recovery Plan Information*

A draft recovery plan for the Stephens' kangaroo rat was developed in 1997 (Service 1997, entire). Although it was never finalized, the draft recovery plan is part of the public record on the Service's views on recovery for the species at that time. The objective of the draft recovery plan is to protect and maintain sufficient populations of Stephens' kangaroo rat and its habitat. The plan states this objective can be accomplished by: (a) establishing ecosystem-based conservation units; (b) preventing destruction and degradation of habitat; (c) managing use of rodenticides and other pesticides; (d) reducing nonnative predators such as domestic cats; (e) establishing research programs to examine the species' biological and ecological needs; and (f) developing and implementing a proactive outreach program for the public and landowners.

The draft plan also identifies several downlisting and delisting criteria (Service 1997, pp. 52–60) for the species. The downlisting criteria include: (1) establishment of four reserves, which encompass at least 15,000 ac (6,070 ha) of occupied habitat and are permanently protected, funded, and managed, in western Riverside County (inside or outside any habitat conservation planning area) (Service 1997, pp. 39–40); and (2) establishment of one ecosystem-based reserve in either western or central San Diego County that is permanently protected, funded, and managed. Ecosystem-based reserves are anticipated to retain their biological diversity and are associated with large areas of

suitable habitat (Service 1997, p. 49). Non-ecosystem reserves are biologically more isolated and are expected to require more intensive management. Both ecosystem and non-ecosystem reserves are needed to retain genetic and phenotypic diversity and provide redundancy to provide protection for species' viability from losses resulting from catastrophic events.

The delisting criteria for the Stephens' kangaroo rat identified in the draft recovery plan (Service 1997, pp. 53–60) are: (1) establish a minimum of five reserves in western Riverside County, of which one is ecosystem-based, and that encompass at least 16,500 ac (6,675 ha) of occupied habitat that is permanently protected, funded, and managed; and (2) establish two ecosystem-based reserves in San Diego County. One of these San Diego County reserves needs to be established in the Western Conservation Planning Area, and one reserve needs to be established in the Central Conservation Planning Area. These reserves are to be permanently protected, funded, and managed.

While the criteria in the draft recovery plan appropriately indicate the need for habitat protection and management of reserves, the criteria do not reflect the species' current conservation status and no longer adequately identify the current threats to the species. At the time the draft recovery plan was developed, habitat loss was the major concern for the species. Due to the implementation of land conservation and management actions (see *Current Conservation Efforts*), other threats may now need greater attention and be a focus for recovery actions (see **Summary of Biological Condition and Threats**). As a result, the downlisting and delisting criteria in the draft recovery plan may not reflect the only means to achieving recovery for the species. However, we still agree with the conservation objectives outlined in the draft recovery plan regarding ecosystem-based reserves.

Currently, under the SKR HCP and Western Riverside MSHCP, eight reserves have been established for Stephens' kangaroo rat in Riverside County. This number

exceeds the four reserves identified by criterion 1 of the draft recovery plan (Service 1997, p. 52). Criterion 1 of the draft recovery plan also identifies that the reserve lands should total approximately 15,000 ac (6,070 ha). We estimate that, of the 331,343 ac (53,153 ha) of modeled potentially suitable habitat for Stephens' kangaroo rat in Riverside County, approximately 36,465 ac (14,757 ha) of the modeled habitat is considered within conserved lands (including reserves) in Riverside County. The majority of these lands are conserved in eight core reserves [19,378 ac (7,842 ha)] under the SKR HCP and Western Riverside MSHCP; however, 17,087 ac (6,915 ha) outside these reserves are also protected as Federal, State, local, and private lands (Service 2021, appendix D). The draft recovery plan also instructs that the 15,000 ac ((6,070 ha) of conserved lands should be in just four reserves. The number of acres conserved in the four largest reserves (17,118 ac (6,927 ha)) currently exceeds this value with four additional reserves, although smaller, that still provide conservation value for the Stephens' kangaroo rat. In addition, three of the four smaller reserves have the opportunity for expansion due to the surrounding lands not being developed or in agricultural use (Service 2021, appendix E). Thus, we conclude that this criterion has been exceeded.

Criterion 2 for downlisting states that one ecosystem-based reserve be established in either western or central San Diego County, though no measure of acreage was indicated in the Recovery Plan. We estimate that approximately 51,737 ac (20,937 ha) of modeled suitable habitat occurs in San Diego County (Service 2021, appendix D). Approximately 62 percent (32,207 ac (13,034 ha)) of this area is located on lands that have been either conserved, are in conservation easement, or are located on public or DoD lands. Current efforts are also underway to develop an HCP for San Diego County that would benefit Stephens' kangaroo rat and other listed species. Though surveys are being conducted in a reserve near Ramona Grassland, the HCP for San Diego County is

not yet finalized, and no ecosystem-based reserve has been established on private lands in San Diego County. However, we have also identified lands on DoD facilities in San Diego County that are important for the long-term persistence of Stephens' kangaroo rat throughout its range. In coordination with the Service, INRMPs for the species have been developed and implemented at three military installations (Camp Pendleton, Detachment Fallbrook, and Warner Springs) (U.S. Navy 2016, entire; U.S. Marine Corps 2018, entire). These INRMPs provide for ongoing management and include actions that assist in the long-term conservation of Stephens' kangaroo rat on DoD lands.

The total modeled habitat within DoD lands with INRMPs is 11,957 ac (4,839 ha). The amount of modeled habitat at each installation is approximately 7,619 ac (3,083 ha) for Camp Pendleton, 2,663 ac (1,078 ha) for Detachment Fallbrook, and 1,675 ac (678 ha) for Warner Springs. The INRMPs are based, to the maximum extent practicable, on ecosystem management principles and provide for the management of Stephens' kangaroo rat and its habitat while sustaining necessary military land uses (Service 2021, pp. 39–43). Therefore, the INRMPs effectively meet the intent of the draft recovery plan's criterion 2 for downlisting by providing long-term management for the conservation of Stephens' kangaroo rat with one ecosystem-based reserve in western San Diego County at Camp Pendleton and Detachment Fallbrook.

We conclude that the number and amount of reserved lands being protected, funded, and managed in Riverside and San Diego Counties provide conservation benefits to Stephens' kangaroo rat and exceed the downlisting criteria in the draft recovery plan.

The delisting criteria for the Stephens' kangaroo rat includes: (1) establishment of a minimum of five reserves in western Riverside County, of which one is ecosystem-based, and that encompass at least 16,500 ac (6,675 ha) of occupied habitat that is permanently protected, funded, and managed; and (2) establishment of two ecosystem-based reserves in San Diego County.

In Riverside County a total of 36,465 ac (14,757 ha) has been conserved, including 19,378 ac (7,842 ha) in eight Stephens' kangaroo rat core reserves, meeting the delisting criteria for the number of reserves needed. However, one ecosystem-based reserve is still needed in Riverside County. We expect additional lands will be conserved through further implementation of the two HCPs. In San Diego County, the number of ecosystem-based reserves (currently one at Camp Pendleton and Detachment Fallbrook) does not meet the criteria identified in the draft recovery plan for delisting for having two ecosystem-based reserves, with one in central San Diego County and one in western San Diego County. Therefore, we will not meet all of the delisting criteria in the draft recovery plan until there is: (1) at least one ecosystem-based reserve that is occupied, permanently protected, funded, and managed is established in Riverside County; and (2) at least one additional ecosystem-based reserve that is occupied, permanently protected, funded, and managed is established in central San Diego County.

## **Regulatory and Analytical Framework**

### *Regulatory Framework*

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an "endangered species" or a "threatened species." The Act defines an "endangered species" as a species that is in danger of extinction throughout all or a significant portion of its range and a "threatened species" as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The Act requires that we determine whether any species is an endangered species or a threatened species because of any of the following factors:

(A) The present or threatened destruction, modification, or curtailment of its habitat or range;

(B) Overutilization for commercial, recreational, scientific, or educational purposes;

(C) Disease or predation;

(D) The inadequacy of existing regulatory mechanisms; or

(E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects. We consider these same five factors in downlisting a species from endangered to threatened (50 CFR 424.11(c)–(e)).

We use the term “threat” to refer in general to actions or conditions that are known to or are reasonably likely to negatively affect individuals of a species. The term “threat” includes actions or conditions that have a direct impact on individuals (direct impacts), as well as those that affect individuals through alteration of their habitat or required resources. The term “threat” may encompass—either together or separately—the source of the action or condition or the action or condition itself.

However, the mere identification of any threat(s) does not necessarily mean that the species meets the statutory definition of an “endangered species” or a “threatened species.” In determining whether a species meets either definition, we must evaluate all identified threats by considering the species' expected response and the effects of the threats—in light of those actions and conditions that will ameliorate the threats—on an individual, population, and species level. We evaluate each threat and its expected effects on the species, then analyze the cumulative effect of all of the threats on the species as a whole. We also consider the cumulative effect of the threats in light of those actions and conditions that will have positive effects on the species—such as any existing regulatory

mechanisms or conservation efforts. The Secretary determines whether the species meets the definition of an “endangered species” or a “threatened species” only after conducting this cumulative analysis and describing the expected effect on the species now and in the foreseeable future.

The Act does not define the term “foreseeable future,” which appears in the statutory definition of “threatened species.” Our implementing regulations at 50 CFR 424.11(d) set forth a framework for evaluating the foreseeable future on a case-by-case basis. The term foreseeable future extends only so far into the future as we can reasonably determine that both the future threats and the species’ responses to those threats are likely. In other words, the foreseeable future is the period of time in which we can make reliable predictions. “Reliable” does not mean “certain”; it means sufficient to provide a reasonable degree of confidence in the prediction. Thus, a prediction is reliable if it is reasonable to depend on it when making decisions.

It is not always possible or necessary to define foreseeable future as a particular number of years. Analysis of the foreseeable future uses the best scientific and commercial data available and should consider the timeframes applicable to the relevant threats and to the species’ likely responses to those threats in view of its life-history characteristics. Data that are typically relevant to assessing the species’ biological response include species-specific factors such as lifespan, reproductive rates or productivity, certain behaviors, and other demographic factors.

#### *Analytical Framework*

The species report documents the results of our comprehensive biological review of the best scientific and commercial data regarding the status of the species, including an assessment of the potential threats to, and conservation measures for, the species and its habitat. The species report does not represent our decision on whether the species should be reclassified as a threatened species under the Act. It does, however, provide the

scientific basis that informs our regulatory decisions, which involve the further application of standards within the Act and its implementing regulations and policies. The following is a summary of the key results and conclusions from the species report; the full species report (Service 2021, entire) can be found at Docket No. FWS-R8-ES-2019-0113 on <https://www.regulations.gov>.

To assess Stephens' kangaroo rat's current and future viability and demographic risks, we consider the concepts of resilience, representation, and redundancy (Shaffer and Stein 2000, pp. 301–302; Wolf *et al.* 2015, entire). Briefly, resiliency supports the ability of the species to withstand environmental and demographic stochasticity (e.g., wet or dry, warm or cold years), redundancy supports the ability of the species to withstand catastrophic events (e.g., long-term droughts, severe wildfire), and representation supports the ability of the species to adapt over time to long-term changes to environmental conditions or habitat (e.g., climate changes, successional changes to habitat). In general, the more resilient and redundant a species is and the more representation it has, the more likely it is to sustain populations over time, even under changing environmental conditions. Using these principles, we identified the species' ecological requirements for survival and reproduction at the individual, population, and species levels, and described the beneficial and risk factors influencing the species' viability.

### **Summary of Biological Condition and Threats**

In this section, we summarize the biological condition of the species and its resources, and the threats that influence the species' current and future condition, in order to assess the species' overall viability and the risks to that viability. For a complete discussion and additional information on the biological condition of the species, see the species report (Service 2021, entire).



The Stephens' kangaroo rat is currently found in a patchy distribution in Riverside and San Diego Counties, California. The distribution and density of populations of the Stephens' kangaroo rat can vary temporally, within and between years, and spatially, depending on natural changes in habitat conditions and succession of plant communities. There has been no formal assessment of the population structure for the Stephens' kangaroo rat such as the minimum habitat patch size or an estimate of the minimum number of interconnected patches needed to support a stable population. Researchers believe that the species' population structure in southern California follows a metapopulation dynamic in which the availability of suitable habitat patches is both spatially and temporally dynamic and is based on the equilibrium between colonization and extirpation of local populations (Brehme *et al.* 2006, p. 6). We conclude that the Stephens' kangaroo rat continues to occur in suitable habitat in seemingly stable populations across its range.

We evaluated all potential threats related to the Stephens' kangaroo rat from: (1) habitat loss, fragmentation, modification, degradation, or other habitat changes due to urban and agricultural development, invasive plants, wildfire, or prescribed burns; (2) overutilization of the species for commercial, recreational, scientific, or educational purposes; (3) disease or predation; (4) use of rodenticides; and (5) the effects of climate change (resulting in increased effects from drought, higher temperatures, precipitation changes, and wildfire). We identified the main threats to the species to be the threats identified in (1) above.

The timeframe for analysis of the threats facing the Stephens' kangaroo rat varies. However, the major threat driving the overall status of Stephens' kangaroo rat is from the effects of past habitat fragmentation. Based on biological and environmental factors and how those are influenced by the driving threats acting on the species, we consider 25–30 years to be the foreseeable future within which we can reasonably determine that the

future threat, and Stephens' kangaroo rat's response to the threat, of habitat fragmentation is likely. This time period includes multiple generations of the species and allows adequate time for existing conservation efforts (such as current land management or additional land protections implemented through existing management plans) to be implemented or changes in threats to be indicated through population responses.

Much of the loss of suitable Stephens' kangaroo rat habitat occurred due to urban and agricultural development in the early to middle 20th century. This loss resulted in fragmentation of the species' range, which currently impacts the species' ability to colonize, recolonize, disperse, and maintain a functioning metapopulation structure within these areas. Current conservation efforts have helped to preserve and manage a significant amount of habitat for Stephens' kangaroo rat across its range. However, some of these lands are not connected, making fragmentation an issue even for some preserved lands and the overall species population dynamics in the future. Because of fragmentation, mechanisms such as colonization and recolonization or population enhancement through dispersal will be unable to function in portions of the species' range. Small scale habitat loss is still occurring outside of conserved areas, causing an increase in population isolation and habitat disconnectivity. In order to counteract these impacts, additional conservation of lands and management actions will continue to be necessary for the species. Although we have not currently identified any population losses as a result of the current level of habitat fragmentation, we have determined habitat fragmentation to be the main driver of future species' viability and for this to be a moderate-level threat for Stephens' kangaroo rat populations in both western Riverside and San Diego Counties.

Based on the best scientific data available for our analysis, we found the current major stressor to Stephens' kangaroo rat is the latent effects of large-scale habitat loss which has resulted in habitat fragmentation for the species. Currently, populations of the

species persist throughout its historical range and likely maintain subsequent genetic makeup and adaptive capabilities. The species currently has a sufficient number of managed populations distributed throughout its historical range (across two counties), providing a margin of safety to withstand catastrophic events. There are also several populations that are presently managed over a large area that could withstand stochastic events. Based on this analysis, Stephens' kangaroo rat is currently maintaining its representation, redundancy, and resiliency. In the future, the impacts from habitat fragmentation may continue to affect Stephens' kangaroo rat populations, and if not addressed could impact their overall fitness by reducing representation (reducing genetic heterozygosity, increased inbreeding), resiliency (impacts from stochastic events), and redundancy (fewer healthy populations, fewer populations overall). This suggests that restoration of connectivity or translocation efforts may be needed to maintain sufficient populations in the future.

Other potential habitat destruction or modification-related threats evaluated in the species report include habitat impacts from nonnative ungulates, off-highway vehicle activity, and the effects of fire suppression or prevention activities. We determined that these were either not a threat (nonnative ungulates) or represented a low-level threat to the species' habitat. Disease or overutilization for commercial, recreational, scientific, or educational purposes are not presently threats to the species and are not expected to change in the future. Predation is not a threat to the species beyond impacts to a few individuals, now or into the future. We determined that the risk of mortality or injury as a result of the use of rodenticides represents a low-level risk at the individual level both currently and in the future due to the current restrictions for general public use of rodenticides and the conduct of these activities in a manner consistent with Federal and applicable State laws, including Environmental Protection Agency label restrictions for pesticide application. Wildfire is both a natural and human-caused event in the currently

occupied range of the Stephens' kangaroo rat. In general, studies have found that wildland or controlled fire management actions represent a beneficial effect to the species. At present, core reserves and other areas in Riverside County are currently being managed for conversion of habitat due to the recent establishment of a nonnative invasive plant, *Oncosiphon piluliferum* (stinknet), which represents a low-level, but not yet rangewide, threat to Stephens' kangaroo rat habitat.

We also assessed the effects of climate change on Stephens' kangaroo rat and its habitat. The best available downscaled regional data using representative concentration pathways for moderate (RCP4.5) and high (RCP8.5) emission concentrations on current and potential future trends related to climate change within locations occupied by the Stephens' kangaroo rat indicate that the areas occupied by the species will be subject to increased temperatures and extreme precipitation events with extended periods of drought. Based on model projections, we can reliably predict this will continue until at least the mid- to late-21st century (2060 to 2100). The effects to the habitat occupied by the Stephens' kangaroo rat from climate change from precipitation changes appear to be minimal. Temperature increases for the area may have an effect on the species' habitat by increasing the potential for wildfires due to drier fuel loads. However, drought conditions appear to provide favorable conditions to the species by reducing cover and creating open spaces. Food resources (seeds) will likely remain stable. The cumulative effects of climate change and wildfire, which could result in an increase in the extent of nonnative grasslands, represents a low-level threat to the Stephens' kangaroo rat and its habitat, and, based on climate change projections, is likely to remain at this level to the 2060s.

We note that, in determining the threats facing the species, we have not only analyzed individual effects on the species, but we have also analyzed their potential cumulative effects and incorporated the cumulative effects into the species report for the species. To assess the current and future condition of the species, we undertake an

iterative analysis that encompasses and incorporates the threats individually and then accumulates and evaluates the effects of all the factors that may be influencing the species, including threats and conservation efforts. Because we consider not just the presence of the factors, but to what degree they collectively influence risk to the entire species, our assessment integrates the cumulative effects of the factors and replaces a standalone cumulative effects analysis.

Currently implemented and ongoing conservation measures including Federal and State mechanisms provide protections to the Stephens' kangaroo rat and its habitat. These include HCPs and INRMPs that benefit Stephens' kangaroo rat and its habitat by implementing management actions that contribute to species' conservation and long-term viability. The Act also provides protections through section 7 and the consultation process and through section 10 using incidental take permits on non-Federal lands (see *Current Conservation Efforts*).

### **Summary of Comments and Recommendations**

In the proposed rule published on August 19, 2020 (85 FR 50991), we requested that all interested parties submit written comments on the proposal by October 19, 2020. We also contacted appropriate Federal and State agencies, scientific experts and organizations, and other interested parties and invited them to comment on the proposal. Newspaper notices inviting general public comment were published in The Press-Enterprise and San Diego Union-Tribune. We did not receive any requests for a public hearing. All substantive information received during the comment period has either been incorporated directly into this final determination or addressed below.

#### *Peer Reviewer Comments*

As discussed in **Supporting Documents** above, we received comments from one peer reviewer. We reviewed all comments we received from the peer reviewer for substantive issues and new information regarding the information contained in the

species report. The peer reviewer generally concurred with our methods and conclusions, and provided additional information, clarifications, and suggestions to improve the final species report. Peer reviewer comments are addressed in the following summary and were incorporated into the final species report as appropriate (Service 2021, entire).

Comments from peer review were generally in support of our findings and analysis. The main concern was how we developed our internal spatial model, which was used to estimate Stephens' kangaroo rat habitat. This model has since been replaced by a more robust model created by CBI (Spencer *et al.* 2021, entire). The RCHCA, who implements the SKR HCP, supported the development of this finer scale model for Stephens' kangaroo rat, which uses Sentinel-2 satellite imagery that can be more readily updated in the future to look at changes in habitat quality (Spencer *et al.* 2021, p. 25). As a result, the species report and this final rule have been updated with new information using the new habitat suitability model.

The reviewer also commented on the relatively low genetic diversity for the species, compared to the high genetic diversity typical of other *Dipodomys* species. In the species report, we discuss that the Stephens' kangaroo rat genetic diversity is the highest in the northern part of the range and decreases in the southern part of the range. Results from a genetic study indicate that the entire range was historically connected and functioning as one continuous population. However, there is evidence that recent habitat fragmentation has caused occurrences within the population to become increasingly isolated, creating a metapopulation-like structure across the range. As described in the **Summary of Biological Condition and Threats**, we consider habitat fragmentation and isolation a threat to the species and potentially the major cause of the species' lower genetic diversity.

*Partner Reviewer Comments*

We received comments from the CDFW and from the DoD facilities identified above regarding the proposed rule. Overall, the commenters supported the finding and provided information to improve the document. One commenter had questions about the original habitat model we used, which has since been replaced with a more robust model. Another commenter provided information about the effects of climate change that has been incorporated into the updated species report (Service 2021). Another comment asked that we clarify whether “conserved lands” on DoD installations is based on management via INRMPs. When discussing conserved lands, we are including modeled habitat that occurs on DoD facilities that are managed by INRMPs and are important for the long-term persistence of Stephens’ kangaroo rat throughout its range. Modeled habitat on DoD lands were included as conserved lands in the species report and in our analysis because they are not likely to be impacted by urban and agricultural development and provide for conservation of the species. The INRMPs implemented on military lands, are expected to continue to provide protections to the species and its habitat. Therefore, we anticipate that current levels of military activity are expected to continue into the foreseeable future, allowing Stephens’ kangaroo rat to continue coexisting on military lands.

We also received comments and questions specific to the 4(d) rule from three DoD installations about how a 4(d) rule would affect consultation. Nothing in the 4(d) rule for Stephens’ kangaroo rat will change in any way the recovery planning provisions of section 4(f) of the Act, the consultation requirements under section 7 of the Act, or the ability of the Service to enter into partnerships for the management and protection of Stephens’ kangaroo rat. However, interagency cooperation may be further streamlined through planned programmatic consultations for the species between us and other Federal agencies, where appropriate. Comments 1–5 below are some additional questions from military installations and our responses regarding the 4(d) rule:

*Comment 1:* Several commenters asked whether other activities not specified in the 4(d) rule could be exempted. They stated that under special conditions actions may not be done specifically for Stephens' kangaroo rat but may have a net benefit for the species and they wondered if those activities might also apply to the 4(d) rule.

Commenters provided examples of the types of activities they wanted us to consider exempting under the 4(d) rule (i.e., ripping of soil, chain dragging, mechanical scraping, pre-suppression fire activities, additional wildfire suppression activities, and other activities associated with grazing, such as erecting a fence).

*Response:* The specific activities associated with ripping of soil, chain dragging, mechanical scraping or other non-specific wildfire suppression activities are not included in the 4(d) rule as exceptions from the general section 9 take prohibitions identified under the Act. We included exceptions that are incidental to activities conducted within the range of the Stephens' kangaroo rat for the purpose of reducing the risk or severity of habitat modification resulting from wildfire and designed to maintain or restore open habitat for Stephens' kangaroo rat, even if these actions may result in some short-term or small level of localized negative effect to Stephens' kangaroo rats. Therefore, activities conducted under plans developed in coordination with the Service that are for the purpose of maintaining, enhancing, or restoring open areas and are beneficial for providing the habitat needs of Stephens' kangaroo rat will be exceptions from section 9(a)(1) of the Act as discussed above. Activities that are not conducted for the purpose of Stephens' kangaroo rat habitat enhancement are not covered under the 4(d) rule and should be discussed further through consultation and coordination under applicable sections of the Act.

*Comment 2:* A few commenters asked whether the 4(d) rule exempts incidental take for plans that were not developed in coordination with the Service.



*Response:* We did not provide exceptions from section 9(a)(1) of the Act for plans that are not developed in coordination with the Service. Specific activities and their impacts will need to be identified and coordinated with the Service. Activities identified in the 4(d) rule could be exempted if they are under a plan developed in coordination with the Service and conducted for the purpose of providing benefits to the species or maintaining or restoring habitat for Stephens' kangaroo rat. Note, Federal agencies that fund, permit, or carry out the activities described in *Comment 1* will still need to ensure, in consultation with the Service, that the activities are not likely to jeopardize the continued existence of the species.

*Comment 3:* A few commenters asked whether specific activities in their INRMP could be covered by the 4(d) rule and whether these activities still required coverage under a biological opinion or a section 10(a)(1)(A) permit. Could activities be covered by the 4(d) rule rather than modifying a biological opinion?

*Response:* The 4(d) rule for Stephens' kangaroo rat will not change in any way the consultation requirements under section 7 of the Act, or our ability to enter into partnerships for the management and protection of the Stephens' kangaroo rat. Regardless of the provisions of a 4(d) rule, Federal agencies are still required to consult with the Service for actions that may affect a listed species. However, if activities are exempted under the 4(d) rule, the Federal action agency will not need take coverage through a biological opinion or a section 10(a)(1)(A) permit. Therefore, the consultation process may be streamlined. However, Federal agencies that fund, permit, or carry out the activities described in this rule will still need to ensure, in consultation with the Service, that the activities are not likely to jeopardize the continued existence of the species.

*Comment 4:* A commenter asked how interagency cooperation may be further streamlined through planned programmatic consultations for the species between Federal agencies and the Service.

*Response:* Programmatic consultations can streamline consultation workload for both the Service and our Federal partners. Forms can be developed to help the Service, Federal agencies, and the regulated public easily understand whether a given action complies with the 4(d) rule and programmatic consultation or not. While work is required up front to complete this kind of consultation, significant streamlining should result once the consultation is completed.

*Comment 5:* A commenter requested that the Service consider additional exemptions from section 9 prohibitions for certain military training activities on military installations with a completed INRMP. The commenter is requesting exemption language for specific activities that the Service has previously determined are “not likely to adversely affect” the Stephens’ kangaroo rat through prior section 7 consultations.

*Response:* We included certain activities in the 4(d) rule that we determined have minimal impacts on the species or its habitat or that will be beneficial for the species’ conservation. Including previous actions would not be appropriate, even if they were previously determined as “not likely to adversely affect”, impacts of actions may vary or conditions for the species may have changed. Activities within plans that are developed in coordination with the Service and that are conducted for the purpose of maintaining, enhancing, or restoring open areas and are beneficial for providing the habitat needs of Stephens’ kangaroo rat will be exempted under section 9(a)(1) of the Act as discussed in the **Provisions of the 4(d) Rule**, below. Other activities that are not conducted for the purpose of Stephens’ kangaroo rat habitat enhancement are not covered under the 4(d) rule and should be discussed further through consultation with the Service.

*Public Comments*

We received public comments from 22 members of the public. The majority of individual commenters did not agree that the species should be downlisted to threatened status, although most did not provide substantive information. Commenters expressed concerns about: (1) a lack of conserved habitat due to increased development, (2) the effects from climate change, (3) a lack of information about population trends, and (4) the potential inadequacy of DoD lands to conserve the species or qualify as ecosystem-based reserves.

*Comment 6:* One commenter pointed out that the Service produced 24 no-jeopardy biological opinions since 2014 and indicated that understanding the cumulative impacts to the Stephens' kangaroo rat over the years is a metric that must be included in evaluating the proposal to downlist because it provides data on how much habitat is no longer available for recovery.

*Response:* We considered the best available information when assessing the status of the Stephens' kangaroo rat. In our evaluation of the amount of potentially available suitable habitat for the species, we considered impacts from current and future threats as well as their cumulative effects in our status evaluation including any activities associated with Service-issued biological opinions.

*Comment 7:* Four commenters expressed concern over the effects from climate change and the negative impacts to Stephens' kangaroo rat, including flooding, changes in food availability, precipitation, and temperature. The commenters believe these threats are more deleterious than the Service's determination in the species report and that the species should not be downlisted. One commenter indicated that future impacts cannot be mitigated by management actions, and another commenter believes findings from researchers (Wilkening *et al.* 2019, entire) run counter to the Service's determination that climate change is a low to moderate threat.

*Response:* We considered the best available information when assessing the status of the Stephens' kangaroo rat. This included an evaluation of threats, including projected impacts from climate change. Climate change at the levels projected in models could impact Stephens' kangaroo rat habitat in the future. That said, the effects of climate change may also benefit the Stephens' kangaroo rat by drying of the habitat, which would most likely reduce vegetation and thatch buildup, which in turn could create more open habitat conditions that benefit Stephens' kangaroo rat. The availability of food resources (primarily grass seeds) is not expected to be greatly impacted from environmental changes with annual grasses favoring wet years and perennial grasses favoring dry years. Some shifts from perennial grasses to nonnative annual grasses may occur, but southern California grasslands have a moderate resistance and recovery potential from such climatic changes (EcoAdapt 2017, entire). The research cited by the commenter (Wilkening *et al.* 2019, p. 8) states that Stephens' kangaroo rat appears to be resilient to direct impacts of climate change, and that management strategies, including translocations, can be used to offset potential indirect impacts from climate change. Based on our assessment, we do not find that the current threats associated with climate change facing Stephens' kangaroo rat are to such an extent and magnitude that the species meets the definition of an endangered species.

*Comment 8:* Six commenters expressed concern of future development increases and the resulting decline in habitat quantity and quality available to Stephens' kangaroo rat.

*Response:* We considered the best available information when assessing the status of the Stephens' kangaroo rat, including an evaluation of impacts from future development and areas protected and managed for the species. We acknowledge that development within the range of Stephens' kangaroo rat will continue to occur in the future. However, the rate, extent, and magnitude of development has been greatly

curtailed due to conservation measures currently in place to conserve habitat for the species. Although future development will continue to be an ongoing threat, large areas of conserved habitat are managed by the SKR HCP and Western Riverside MSHCP to help recover Stephens' kangaroo rat and account for the majority of conserved lands in Riverside County (35,888 ac (14,524 ha)). In San Diego County, 32,207 ac (13,034 ha) are considered conserved. DoD installations manage for Stephens' kangaroo rat through implementation of INRMPs on approximately 11,957 ac (4,839 ha). Implementation of management actions for the species through HCPs in Riverside County and INRMPs in San Diego County help to prevent further habitat loss. We expect that additional lands will be conserved in the future through the two existing HCPs as part of their permit agreements. Therefore, we do not consider future development to be a driving force for determining the status of the species into the foreseeable future based on the level of threats associated with future development.

*Comment 9:* Two commenters expressed concern with defining DoD lands as “conserved” and do not believe these lands adequately protect Stephens' kangaroo rat. They argue that additional habitat needs to be conserved before we downlist the species and that DoD lands are not adequate to conserve the species or qualify as ecosystem-based reserves.

*Response:* When analyzing the threat to the Stephens' kangaroo rat from development, we considered lands conserved if they were not likely to be impacted by urban and agricultural development. Modeled habitat within conserved lands for both Riverside and San Diego Counties included conservation easements, conserved lands, and public/quasi-public, Federal, State, and DoD lands that are not likely to be impacted by urban and agricultural development. DoD lands were included because of the commitment military installations are making to manage for Stephens' kangaroo rat through implementation of their INRMPs. The development of the INRMPs was in

coordination with both the Service and CDFW, and these plans include specific measures for habitat protection and conservation for the Stephens' kangaroo rat. Based on prior survey reports, occurrences of Stephens' kangaroo rat are doing well under current management and the Service has no reason to conclude that the military's management approaches will change in the future. Therefore, we have determined it appropriate to consider DoD lands being managed under INRMPs to be conserved for the purposes of restricting development as well as managing other threats to the species.

Ecosystem-based reserves are anticipated to retain their biological diversity and are associated with large areas of suitable habitat. Current implementation of actions by the installations through their INRMPs effectively meets the intent of the draft recovery plan's second criterion for downlisting by providing long-term management for the conservation of Stephens' kangaroo rat with one ecosystem-based reserve in western San Diego County at Camp Pendleton and Detachment Fallbrook.

*Comment 10:* Two commenters expressed concerns over habitat fragmentation, with one commenter stating that fragmented and isolated populations are continuing to be impacted by development, fire, and off-road activities, notably in San Diego County. In the commenters' view, until all fragmented populations are showing a strong and steady increase, Stephens' kangaroo rat should not be downlisted from endangered to threatened.

*Response:* Due in part to the threats that the commenters cited, the Stephens' kangaroo rat will continue to receive the Act's protections as a threatened species. Past rapid habitat loss from development was one of the reasons for initially listing the Stephens' kangaroo rat with an endangered status. Implementation of conservation efforts for protecting and managing habitat has curtailed large-scale habitat losses, and those measures along with other actions have largely met the intent of the criteria in the draft recovery plan for downlisting the species to threatened. Based on the best available data,

we have determined that habitat fragmentation remains a moderate-level stressor to the Stephens' kangaroo rat and its habitat, and we can reliably predict that these habitat conditions are likely to remain into the foreseeable future. Translocations could potentially be used in the future, if necessary, to reintroduce the species back into suitable areas and help restore connectivity. Ongoing genetics work will help inform if and where translocations are needed. These efforts and habitat restoration efforts would help to better connect occupied areas and mitigate the impacts of fragmentation.

*Comment 11:* One commenter stated that habitat is constantly changing and that it may become less suitable for Stephens' kangaroo rat through lack of management, inappropriate management, or other competing management priorities. Even in situations where land has been protected for conservation purposes (as opposed to the simple restriction of conversion to other land uses), Stephens' kangaroo rat may not be the priority for management, and other conservation uses may compete for management resources and priorities.

*Response:* Activities to help protect Stephens' kangaroo rat and its habitat are being implemented through existing management and conservation plans. These actions that provide a benefit to the Stephens' kangaroo rat as identified in these plans (HCPs, INRMPS) will continue to be implemented after the species is downlisted in coordination with the Service. A rangewide management and monitoring plan has also recently been completed for the species to help coordinate recovery efforts with partners and facilitate Stephens' kangaroo rat management throughout its range (Spencer *et al.* 2021, entire).

*Comment 12:* Several commenters raised concerns with downlisting Stephens' kangaroo rats based on the lack of current population or density estimates and lack of recent and consistent rangewide monitoring for the species. One commenter also indicated that the use of modeled suitable habitat does not capture the status and trends of

population size and density in a manner sufficient to decide the actual health of the Stephens' kangaroo rat population.

*Response:* The habitat suitability model used in the species report is used to further understand the species status, as population estimates are unknown and fluctuate greatly. Although population data is incomplete, habitat models and near term population trends show sufficient resiliency that Stephens' kangaroo rat is not in danger of extinction now, and therefore does not meet the definition of an endangered species. The modeling provides an estimate of how much suitable habitat is available in each of the five ecoregions described. Based on the new habitat suitability model, 184,367 ac (74,610 ha) of modeled habitat was identified for the Stephens' kangaroo rat, with approximately 131,343 ac (53,153 ha) located in Riverside County and 51,737 ac (20,937 ha) in San Diego County. Until additional, standardized population monitoring information becomes available across the entire range of the species and robust statistical models are developed, we consider the results from the CBI spatial analyses to be based on the best available information and support sufficient resiliency for the species across its range.

*Comment 13:* One commenter stated that conservation requirements described in the draft recovery plan have yet to be achieved—specifically, the need for 15,000 ac (6,070 ha) over four reserves (instead of eight as indicated in the species report) in Riverside County and the need for one ecosystem-based reserve in San Diego County. The Service's reasoning that the requirements need not be met to achieve species recovery is flawed.

*Response:* We assessed the status of the Stephens' kangaroo rat and determined that the species meets the definition of threatened. The draft recovery plan identified establishment of four reserves, which encompass at least 15,000 ac (6,070 ha) in western Riverside County. To date approximately 35,888 ac (14,524 ha) have been conserved through HCPs in western Riverside County, including 19,378 ac (7,842 ha) that have



been conserved in the eight managed core reserves. A total of 17,118 ac (6,927 ha) have been conserved in the four largest reserves. Therefore, the current total reserve number and acreages exceed that identified in the draft recovery plan.

The draft recovery plan also identified that one ecosystem-based reserve be established in San Diego County. In San Diego County, 32,207 ac (13,034 ha) are conserved with 11,957 ac (4,839 ha) of modeled habitat among the three DoD installations. The installations are actively managing for the species through implementation of their INRMPs, and we find that DoD will continue to manage these areas in the future. The INRMPs are based, to the maximum extent practicable, on ecosystem management principles and provide for the management of Stephens' kangaroo rat and its habitat while sustaining necessary military land uses. The DoD has a close working relationship with the Service and CDFW and has shown a commitment through their actions in protecting sensitive species and their habitat including Stephens' kangaroo rat. Based on the latest survey reports, occupancy is stable or increasing on military lands and Stephens' kangaroo rats do not appear to be negatively impacted from the military activities that have been occurring for many years. Furthermore, we have determined that existing conservation actions, such as those implemented in the INRMPs, are expected to continue to provide protections for the species and its habitat; therefore, we do not predict a change in these trends in the future. We have determined that the conservation activities occurring at DoD facilities in San Diego County meet the intent of the recovery criterion 2 to downlist. Therefore, the number and amount of reserved lands being protected, funded, and managed in Riverside and San Diego Counties provide conservation benefits to Stephens' kangaroo rat and meet the intent of the downlisting criteria.

*Comment 14:* One commenter indicated the species should not be downlisted because the Service would protect Stephens' kangaroo rats more if they were listed as endangered.

*Response:* We do not consider whether a species is more or less protected as either endangered or threatened in our determination of whether a species warrants reclassification. In this downlisting determination, the Stephens' kangaroo rat will continue to have all the section 9 take prohibitions as an endangered species except for certain activities identified under section 4(d) for the species. We have determined that these exceptions will not significantly impact the species' status and provide for incentives to landowners to further work toward and provide conservation for the species. In addition, section 7 of the Act requires consultation for both endangered and threatened species to ensure Federal actions do not jeopardize the continued existence of the species.

*Comment 15:* The San Diego County Fire Authority requested that the proposed 4(d) rule account for local jurisdictions that have more stringent defensible space requirements than the State of California fire code.

*Response:* We have amended the 4(d) language in the final rule to include local fire codes/ordinances using the additional language recommended by the commenter.

### **Determination of Stephens' Kangaroo Rat Status**

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species meets the definition of an endangered species or a threatened species. The Act defines an "endangered species" as a species that is in danger of extinction throughout all or a significant portion of its range and a "threatened species" as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. For a more detailed discussion on the factors considered when determining whether a species meets the definition of an endangered species or a threatened species and our

analysis on how we determine the foreseeable future in making these decisions, please see **Regulatory and Analytical Framework**.

*Status Throughout All of Its Range*

After evaluating threats to the species and assessing the cumulative effect of the threats under the section 4(a)(1) factors, we find that the current viability of the Stephens' kangaroo rat is higher now than at the time of listing due to a reduction of threats, discovery of additional areas occupied by the species, and implementation of extensive conservation actions and management by partnering agencies throughout the species' range.

In particular, the Stephens' kangaroo rat was listed as endangered in 1988, mostly due to the direct and indirect effects of rapid loss, degradation, and fragmentation of habitat for the species. Since the time of listing, numerous searches and surveys have resulted in the discovery of additional areas where Stephens' kangaroo rat occurs. Currently, 18 areas (12 areas in Riverside County and 6 areas in San Diego County) have been identified, 7 more than what was known at the time of listing. Although not considered a population expansion since listing, the discovery of additional occupied areas has reduced the level of threat for the species as a whole and increased the redundancy for the species making it more able to recover from catastrophic events. While we do not have specific quantified information on the status and trends for populations of the species, no significant population declines or extirpations have been observed since listing.

Also, since the time of listing, several large-scale habitat conservation efforts (SKR HCP, Western Riverside MSHCP) have been implemented by the RCHCA and Regional Conservation Authority, respectively. These two conservation efforts have established a total of eight adaptively managed reserves for Stephens' kangaroo rat in Riverside County. In addition, the DoD developed INRMPs for conserving the species

and its habitat on three military facilities in San Diego County. DoD works with the Service in development and implementation of the plans to consider and conserve threatened and endangered species and their habitat. Ongoing monitoring studies and conservation actions implemented under the Sikes Act authority at these three DoD installations in San Diego County provide important conservation benefits to the Stephens' kangaroo rat, as summarized above and in the species report (Service 2021, pp. 75–79).

Together, these conservation efforts in Riverside and San Diego Counties have conserved approximately 68,701 ac (27,802 ha) of modeled Stephens' kangaroo rat habitat throughout the species' range. These conservation measures have met the intent of the downlisting criteria identified in our draft recovery plan.

Thus, after assessing the best available information, we conclude that the Stephens' kangaroo rat no longer meets the Act's definition of an endangered species. We therefore proceed with determining whether the Stephens' kangaroo rat is likely to become endangered within the foreseeable future throughout all of its range.

Although current conservation efforts have preserved and managed lands occupied by the species, in some instances these preserved areas are not connected. In addition, we recognize that localized small-scale habitat loss is still occurring and the ongoing impacts from past and future habitat fragmentation will continue to affect the species' population dynamics. Stephens' kangaroo rat population mechanisms such as colonization and recolonization or population enhancement through dispersal will be unable to function in portions of the species' range. In addition, some areas where the species is found are not located in preserved or managed lands and the habitat within these areas may be degraded and not fully provide for the needs of the species causing additional fragmentation. These threats will result in increasing population isolation and

habitat disconnectivity, and we expect that additional conservation of lands and management actions will continue to be necessary for the species.

In consideration of these various impact issues and after assessing the best scientific and commercial information available, we conclude that the Stephens' kangaroo rat is not currently in danger of extinction but is likely to become in danger of extinction in the foreseeable future throughout all of its range.

*Status Throughout a Significant Portion of Its Range*

Under the Act and our implementing regulations, a species may warrant listing if it is in danger of extinction or likely to become so in the foreseeable future throughout all or a significant portion of its range. The court in *Center for Biological Diversity v. Everson*, 2020 WL 437289 (D.D.C. Jan. 28, 2020) (*Center for Biological Diversity*), vacated the aspect of the Final Policy on Interpretation of the Phrase “Significant Portion of Its Range” in the Endangered Species Act’s Definitions of “Endangered Species” and “Threatened Species” (79 FR 37578; July 1, 2014) that provided that the Service does not undertake an analysis of significant portions of a species’ range if the species warrants listing as threatened throughout all of its range (79 FR 37578, July 1, 2014). Therefore, we proceed to evaluating whether the species is endangered in a significant portion of its range—that is, whether there is any portion of the species’ range for which both (1) the portion is significant, and (2) the species is in danger of extinction in that portion. Depending on the case, it might be more efficient for us to address the “significance” question or the “status” question first. We can choose to address either question first. Regardless of which question we address first, if we reach a negative answer with respect to the first question that we address, we do not need to evaluate the other question for that portion of the species’ range.

Following the court’s holding in *Center for Biological Diversity*, we now consider whether there are any significant portions of the species’ range where the species is in

danger of extinction now (i.e., endangered). In undertaking this analysis for Stephens' kangaroo rat, we choose to address the status question first—we consider information pertaining to the geographic distribution of both the species and the threats that the species faces to identify any portions of the range where the species is endangered.

The statutory difference between an endangered species and a threatened species is the time horizon in which the species becomes in danger of extinction: An endangered species is in danger of extinction now, while a threatened species is not in danger of extinction now but is likely to become so in the foreseeable future. Thus, we considered the time horizon for the threats that are driving the Stephens' kangaroo rat to warrant listing as a threatened species throughout all of its range. As stated above, the effects of habitat fragmentation (limiting dispersal and recolonization, reducing genetic exchange, isolating populations) is the greatest future threat to the species. These effects are expected to occur in the future throughout its range in both western Riverside and San Diego Counties as genetic structuring continues increase throughout the range. As further explained below, however, based on limited known current population sizes, distribution, and trends, it appears that the species currently has a relatively stable status.

The Service recognizes that fragmentation driven by continuing development is expected to impact the species into the future, and that existing conserved and managed lands in both western Riverside and San Diego Counties have slowed or limited the negative impacts created from such fragmentation. These land conservation and management efforts are currently benefiting the species to the level that the species is not now endangered. The Service further recognizes, however, that because development and loss of habitat were so extensive and severe in the past, work will be needed in the future to reconnect populations in conserved areas currently being managed as ecosystem reserves and areas outside those considered as ecosystem reserves, such as central San Diego County.

The impacts from future habitat fragmentation will continue to isolate populations. This is especially true if land conservation efforts are not able to conserve areas between populations for connectivity. In addition, currently occupied lands, both conserved and not conserved, will require ongoing management such as prescribed fire or other measures to reduce vegetation buildup ensuring habitat suitability and persistence of the species. We expect vegetation control will be an ongoing habitat management concern and the species will continue to be reliant to some degree on habitat or species management into the future.

To review these threats in the context of a potential portion of the Stephens' kangaroo rat range that may be endangered, it must be considered that the Stephens' kangaroo rat's population structure follows a metapopulation dynamic and is based on the equilibrium between colonization and extirpation of local populations. And although estimates have been made on habitat patch size and its availability, there has been no rangewide systematic assessment of the population structure for the Stephens' kangaroo rat to determine the specific requirements or characteristics of stable populations or estimate the minimum number of interconnected patches needed to support a potential metapopulation. Without these forms of information, the current and best available information on habitat conditions, species persistence within occupied areas, and species distribution indicates that the current populations appear stable.

The Service understands the importance of habitat and population connectivity is emphasized for a species that exists through an equilibrium of colonization and extirpation of local populations. And as a result of the largescale habitat loss in the past, our analysis and modeling of the existing suitable habitat available to the Stephens' kangaroo rat shows the species faces some level of habitat isolation in both western Riverside and San Diego Counties. The challenges to the species from this isolation, however, although currently impacting the species, will most likely manifest themselves

to a greater extent in future generations as the timeframe of genetic isolation increases and may reach a point where the metapopulation dynamics of the populations will become further stressed or decline and not allow for normal bolstering of populations or recolonization. These analyses indicate that restoring connectivity and/or conducting translocation efforts may be needed to address the increased difficulty of the species to recolonize areas in the future and to maintain populations that may otherwise become extirpated.

The best scientific and commercial data available do not otherwise indicate that any of the threats to the species and the species' responses to those threats discussed above are more prevalent or immediate in any portion(s) of the species' range.

Given this assessment and recognizing that the current amount and type of reserves for Stephens' kangaroo rat does not meet the draft recovery plan requirements for delisting, we still conclude that the best scientific and commercial data available indicate that the time horizon of threats to the species and the species' responses to those threats, is similar throughout its range and likely to occur in the foreseeable future. Therefore, we determine that the Stephens' kangaroo rat is not in danger of extinction now in any portion of its range, but that the species is likely to become in danger of extinction within the foreseeable future throughout all of its range. This is consistent with the courts' holdings in *Desert Survivors v. Department of the Interior*, No. 16-cv-01165-JCS, 2018 WL 4053447 (N.D. Cal. Aug. 24, 2018), and *Center for Biological Diversity v. Jewell*, 248 F. Supp. 3d , 946, 959 (D. Ariz. 2017).

#### *Determination of Status*

Our review of the best scientific and commercial data available indicates that the Stephens' kangaroo rat meets the definition of a threatened species. Therefore, we are downlisting the Stephens' kangaroo rat as a threatened species in accordance with sections 3(20) and 4(a)(1) of the Act.



In addition, it is our policy, as published in the *Federal Register* on July 1, 1994 (59 FR 34272), to identify to the maximum extent practicable at the time a species is listed, those activities that would or would not constitute a violation of section 9 of the Act. The intent of this policy is to increase public awareness of the effect of a listing on proposed and ongoing activities within the range of the listed species. Because we are listing this species as a threatened species, the prohibitions in section 9 will not apply directly. We are therefore putting into place a set of regulations to provide for the conservation of the species in accordance with section 4(d), which also authorizes us to apply any of the prohibitions in section 9 to a threatened species. The 4(d) rule, which includes a description of the kinds of activities that will or will not constitute a violation, complies with this policy.

#### **Final Rule Issued Under Section 4(d) of the Act**

Section 4(d) of the Act contains two sentences. The first sentence states that the Secretary shall issue such regulations as [s]he deems necessary and advisable to provide for the conservation of species listed as threatened. The U.S. Supreme Court has noted that statutory language like “necessary and advisable” demonstrates a large degree of deference to the agency (see *Webster v. Doe*, 486 U.S. 592 (1988)). Conservation is defined in the Act to mean the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Additionally, the second sentence of section 4(d) of the Act states that the Secretary may by regulation prohibit with respect to any threatened species any act prohibited under section 9(a)(1), in the case of fish or wildlife, or section 9(a)(2), in the case of plants. Thus, the combination of the two sentences of section 4(d) provides the Secretary with wide latitude of discretion to select and promulgate appropriate regulations tailored to the specific conservation needs of the

threatened species. The second sentence grants particularly broad discretion to us when adopting the prohibitions under section 9.

The courts have recognized the extent of the Secretary's discretion under this standard to develop rules that are appropriate for the conservation of a species. For example, courts have upheld rules developed under section 4(d) as a valid exercise of agency authority where they prohibited take of threatened wildlife, or include a limited taking prohibition (see *Alsea Valley Alliance v. Lautenbacher*, 2007 U.S. Dist. Lexis 60203 (D. Or. 2007); *Washington Environmental Council v. National Marine Fisheries Service*, 2002 U.S. Dist. Lexis 5432 (W.D. Wash. 2002)). Courts have also upheld 4(d) rules that do not address all of the threats a species faces (see *State of Louisiana v. Verity*, 853 F.2d 322 (5th Cir. 1988)). As noted in the legislative history when the Act was initially enacted, "once an animal is on the threatened list, the Secretary has an almost infinite number of options available to him with regard to the permitted activities for those species. He may, for example, permit taking, but not importation of such species, or he may choose to forbid both taking and importation but allow the transportation of such species" (H.R. Rep. No. 412, 93rd Cong., 1st Sess. 1973).

Exercising this authority under section 4(d), we have developed a rule that is designed to address the Stephens' kangaroo rat's specific threats and conservation needs. Although the statute does not require us to make a "necessary and advisable" finding with respect to the adoption of specific prohibitions under section 9, we find that this rule as a whole satisfies the requirement in section 4(d) of the Act to issue regulations deemed necessary and advisable to provide for the conservation of the Stephens' kangaroo rat. As discussed under **Summary of Biological Condition and Threats**, we have concluded that the Stephens' kangaroo rat is likely to become in danger of extinction within the foreseeable future primarily due to the population effects from habitat loss and degradation and fragmentation due to isolation of existing populations.

Because the Stephens' kangaroo rat's population structure follows a metapopulation dynamic and is based on the equilibrium between colonization and extirpation of local populations, the importance of habitat and population connectivity is emphasized. The fragmented habitat currently limits the species' ability to colonize, recolonize, disperse, and maintain a functioning metapopulation structure. Habitat degradation has led to areas being overgrown and not being able to provide the habitat needs of the species. Because habitat fragmentation and degradation affects so many aspects of the species' life history and population dynamics, we have determined that it is appropriate to apply all the prohibitions and provisions for endangered wildlife under section 9(a)(1) of the Act for the Stephens' kangaroo rat except as described and explained below. Applying these section 9(a)(1) prohibitions will help minimize threats that could cause further declines in the status of the species. The provisions of this 4(d) rule will promote conservation of the Stephens' kangaroo rat by encouraging management of the landscape in ways that meet both land management considerations and the conservation needs of the species. The provisions of this rule are one of many tools that we will use to promote the conservation of the Stephens' kangaroo rat.

#### **Provisions of the 4(d) Rule**

This 4(d) rule will provide for the conservation of the Stephens' kangaroo rat by prohibiting the following activities, except as otherwise authorized or permitted: importing or exporting; take; possession and other acts with unlawfully taken specimens; delivering, receiving, transporting, or shipping in interstate or foreign commerce in the course of commercial activity; or selling or offering for sale in interstate or foreign commerce.

Under the Act, "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Some of these provisions have been further defined in regulation at 50 CFR 17.3. Take can result

knowingly or otherwise, by direct and indirect impacts, intentionally or incidentally. Regulating incidental and/or intentional take will help preserve the species' remaining populations, slow their rate of decline, and decrease cumulative, negative effects from other threats.

As described in our analysis of the species' status, the primary driver of the Stephens' kangaroo rat's continued viability is the effects from habitat loss and degradation and habitat fragmentation. These threats reduce habitat availability and suitability due to a lack of connectivity between areas and buildup of dense vegetation resulting from a lack of disturbance. The Stephens' kangaroo rat prefers open, annual grasslands and open intermediate-seral-stage (secondary succession) plant communities that are maintained by disturbance. Areas with dense vegetation (grasses or shrubs) are avoided and are not suitable habitat. Therefore, activities that are conducted for the purpose of maintaining, enhancing, or restoring open areas are beneficial for providing the habitat needs of the species because such activities contribute to species conservation and long-term species viability. Such activities may include, but are not limited to: nonnative or invasive plant removal, grazing activities for the purpose of vegetation management, prescribed burns, wildfire suppression activities, mowing, activities designed to promote native annual forbs and maintain or restore open habitat for the species, or other actions related to habitat restoration or species recovery efforts.

More specifically, nonnative, invasive, or noxious plant removal includes noxious weed control in the course of habitat management and restoration to benefit Stephens' kangaroo rat or other sensitive species in the grassland habitat. Livestock grazing includes those grazing activities conducted as part of habitat management and restoration to benefit Stephens' kangaroo rat or other native species in the grassland habitat as described in plans developed in coordination with the Service. Fire and wildfire management and suppression includes activities such as prescribed burns, fuel reduction

activities, maintenance of fuel breaks by mowing, defensible space maintenance actions, and firefighting activities associated with actively burning fires to reduce risk to life or property. Discing or blading areas to maintain fuel breaks, unless being conducted for suppression of active wildfires, should be avoided in areas occupied by the species unless otherwise approved by the Service.

We find that actions taken by management entities in the range of the Stephens' kangaroo rat for the purpose of reducing the risk or severity of habitat degradation and designed to promote native annual forbs and maintain or restore open habitat for Stephens' kangaroo rat, even if these actions may result in some short-term or small level of localized negative effect to Stephens' kangaroo rats, will further the goal of reducing the likelihood of the species becoming an endangered species, and will also continue to contribute to its conservation and long-term viability.

We recognize that the types of actions identified above are often undertaken by land management entities or private landowners through inclusion in land management plans, strategies, or cooperative agreements that are approved by the Service, and that these plans, strategies, and agreements address identified negative effects to Stephens' kangaroo rat conservation. We find that such approved plans, strategies, or agreements, developed in coordination with the Service, will adequately reduce or offset any negative effects to Stephens' kangaroo rat so that they will not result in a further decline of the species. Likewise, actions undertaken by management entities included in formal land management conservation plans developed in coordination with the Service (such as INRMPS), where the intended purpose is consistent with the conservation needs of the Stephens' kangaroo rat, also provide an overall conservation benefit that contributes to long-term species viability and reduces the likelihood of the species becoming endangered in the future.

We may issue permits to carry out otherwise prohibited activities, including those described above, involving threatened wildlife under certain circumstances. Regulations governing permits are codified at 50 CFR 17.32. With regard to threatened wildlife, a permit may be issued for the following purposes: scientific purposes, to enhance propagation or survival, for economic hardship, for zoological exhibition, for educational purposes, for incidental taking, or for special purposes consistent with the purposes of the Act. The statute also contains certain exemptions from the prohibitions, which are found in sections 9 and 10 of the Act.

We recognize the special and unique relationship with our State natural resource agency partners in contributing to conservation of listed species. State agencies often possess scientific data and valuable expertise on the status and distribution of endangered, threatened, and candidate species of wildlife and plants. State agencies, because of their authorities and their close working relationships with local governments and landowners, are in a unique position to assist us in implementing all aspects of the Act. In this regard, section 6 of the Act provides that we shall cooperate to the maximum extent practicable with the States in carrying out programs authorized by the Act. Therefore, any qualified employee or agent of a State conservation agency that is a party to a cooperative agreement with us in accordance with section 6(c) of the Act, who is designated by his or her agency for such purposes, will be able to conduct activities designed to conserve Stephens' kangaroo rat that may result in otherwise prohibited take without additional authorization.

Nothing in this 4(d) rule will change in any way the recovery planning provisions of section 4(f) of the Act, the consultation requirements under section 7 of the Act, or our ability to enter into partnerships for the management and protection of the Stephens' kangaroo rat. However, interagency cooperation may be further streamlined through

planned programmatic consultations for the species between us and other Federal agencies, where appropriate.

### **Required Determinations**

#### *National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

We have determined that environmental assessments and environmental impact statements, as defined under the authority of the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), need not be prepared in connection with determining a species' listing status under the Endangered Species Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

#### *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes.

We informed all Tribes within the Carlsbad Fish and Wildlife Office boundary about the proposed downlisting of Stephens' kangaroo rat, including the 4(d) rule, and

species report. We conveyed that a 4(d) rule will provide additional management flexibility for landowners within the species' range to conduct weed and fire management activities and other beneficial actions that are outlined in approved management plans. We also excluded modeled habitat on Tribal lands from our viability analysis, including lands owned by the Morongo Band of Mission Indians, Soboba Band of Luiseno Indians, Cahuilla Band of Mission Indians, Pechanga Band of Luiseno Mission Indians, Rincon Band of Luiseno Mission Indians, San Pasqual Band of Diegueno Mission Indians, Iipay Nation of Santa Ysabel, and Mesa Grande Band of Diegueno Mission Indians (a small 10-15 acre parcel classified as a Public Domain Allotment was also excluded in San Diego County). This exclusion means that we find that actions such as management and habitat conservation are not required on Tribal lands to achieve species recovery.

### **References Cited**

A complete list of references cited in this rulemaking is available on the internet at <https://www.regulations.gov> and upon request from the Carlsbad Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

### **Authors**

The primary authors of this final rule are the staff members of the Fish and Wildlife Service's Species Assessment Team and the Carlsbad Fish and Wildlife Office.

### **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Plants, Reporting and recordkeeping requirements, Transportation, Wildlife.

### **Regulation Promulgation**

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

### **PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS**

1. The authority citation for part 17 continues to read as follows:



Authority: 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

2. Amend § 17.11, in paragraph (h), by revising the entry for “Kangaroo rat, Stephens’” under MAMMALS in the List of Endangered and Threatened Wildlife to read as follows:

**§ 17.11 Endangered and threatened wildlife.**

\* \* \* \* \*

(h) \* \* \*

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
MAMMALS				
* * * * *				
Kangaroo rat, Stephens’	<i>Dipodomys stephensi</i> (incl. <i>D. cascus</i> )	Wherever found	T	53 FR 38465, 9/30/1988; 87 FR [Insert <i>Federal Register</i> page where the document begins]; [Insert date of publication in the <i>Federal Register</i> ]; 50 CFR 17.40(t). <sup>4d</sup>
* * * * *				

3. Amend § 17.40 by adding paragraph (t) to read as follows:

**§ 17.40 Special rules—mammals.**

\* \* \* \* \*

(t) Stephens’ kangaroo rat (*Dipodomys stephensi*).

(1) *Prohibitions.* The following prohibitions that apply to endangered wildlife also apply to Stephens’ kangaroo rat. Except as provided under paragraph (t)(2) of this section and §§ 17.4 and 17.5, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or cause to be committed, any of the following acts in regard to this species:

(i) Import or export, as set forth at § 17.21(b) for endangered wildlife.

(ii) Take, as set forth at § 17.21(c)(1) for endangered wildlife.

(iii) Possession and other acts with unlawfully taken specimens, as set forth at § 17.21(d)(1) for endangered wildlife.

(iv) Interstate or foreign commerce in the course of commercial activity, as set forth at § 17.21(e) for endangered wildlife.

(v) Sale or offer for sale, as set forth at § 17.21(f) for endangered wildlife.

(2) *Exceptions from prohibitions.* In regard to Stephens' kangaroo rat, you may:

(i) Conduct activities as authorized by a permit under § 17.32.

(ii) Take, as set forth at § 17.21(c)(2) through (4) for endangered wildlife.

(iii) Take, as set forth at § 17.31(b).

(iv) Possess and engage in other acts with unlawfully taken wildlife, as set forth at § 17.21(d)(2) for endangered wildlife.

(v) Implement livestock grazing in the course of habitat management and restoration to benefit Stephens' kangaroo rat or other native species in the grassland habitat as approved by the Service.

(vi) Conduct the following wildfire suppression activities:

(A) Activities necessary to maintain the minimum clearance (defensible space) requirement from any occupied dwelling, occupied structure, or to the property line, whichever is nearer, to provide reasonable fire safety and to reduce wildfire risks consistent with the State of California fire codes or local fire codes/ordinances.

(B) Fire management actions (e.g., prescribed burns, hazardous fuel reduction activities) on protected/preserve lands to maintain, protect, or enhance habitat occupied by Stephens' kangaroo rat. These activities are to be coordinated with and reported to the Service in writing and approved the first time an individual or agency undertakes them.

(C) Maintenance of existing fuel breaks.

(D) Firefighting activities associated with actively burning wildfires to reduce risk

to life or property.

(vii) Remove nonnative, invasive, or noxious plants for the purpose of Stephens' kangaroo rat conservation as approved by the Service. This includes noxious weed control and other vegetation reduction in the course of habitat management and restoration to benefit Stephens' kangaroo rat, including mechanical and chemical control, provided that these activities are conducted in a manner consistent with Federal and applicable State laws, including Environmental Protection Agency label restrictions for herbicide application.

(viii) Implement activities conducted as part of a plan developed in coordination with the Service or the California Department of Fish and Wildlife that are for the purpose of Stephens' kangaroo rat conservation.

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**Martha Williams,**  
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*Exercising the Delegated Authority of the Director,*  
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